Christina Song

M: 0478517075 | E: <u>z5309328@zmail.unsw.edu.au</u> | Sydney NSW

PROFILE

- Graduated from **UNSW** in **Earth Science (Geology)** with **First-Class Honours**, completing research in geochronology of volcanic deposits and granitic rocks, developing analytical and problem-solving skills.
- Conducted analysis in a groundwater project, successfully quantifying groundwater recharge thresholds. The research paper is currently in the process of **publication**.
- Gained hands-on **fieldwork** experience through relevant coursework in **structural geology** and participation in the Camp of **Applied Geophysics Excellence (CAGE)**, including seismic, electromagnetic, and resistivity surveys.
- Effective communicator with 3+ years of experience in customer service and hospitality while completing academic studies, demonstrating strong organisational skills by balancing work, study, and research responsibilities.
- Holds a valid driver's licence.

EDUCATION

Bachelor of Advanced Science (First Class Honours in Geology)

Feb 2020 - Sept 2024

- Major: Earth Science (Geology)
- University of New South Wales (UNSW)

RESEARCH EXPERIENCE

Honours Thesis Sept 2023 – Sept 2024

'A multi-geochronological approach to define the ages of crystallisation and alteration associated with mineralisation for the Rylstone Volcanics, Coomber Formation and spatially associated Botobolar Granite, Lue-Rylstone area, NSW, Australia'

- Enhanced the understanding of the Mudgee-Kandos region's geological history by conducting multi-geochronology analysis to define the age of crystallisation and alteration in the Rylstone Volcanics, Coomber Formation and Botobolar Granites.
- Gained hands-on experience in U-Pb, Re-Os, Ar-Ar age-dating analysis and, EMPA and Sulphur Isotope analysis, processing and analysing large, complex datasets to derive key conclusions.
- Applied critical analysis to geochemical datasets, extracting valuable insights to inform geological interpretation.

Special Research Project in Groundwater Recharge - Publication in Progress UNSW

Sept 2022 – Dec 2022

- Conducted a groundwater research project (mini-honours) building upon Bian et al. 2019, to determine the relationship between groundwater recharge, fire regime and rainfall amounts.
- Performed site visits to assess equipment condition and understand the local geology, vegetation and environmental factors.
- Presented findings at the International Association of Hydrologists conference in Sydney (10 October 2023) to an audience of
 ~30 industry professionals.
- The research is currently under pre-print review in the *Hydrology and Earth System Sciences* (HESS) journal for publication and is open for public discussion.

RELEVANT EXPERIENCE

Fieldwork and Professional Experience

Sept 2023 – Oct 2023

Camp for Applied Geophysics Excellence (Perth)

- Completed a 7-day intensive geophysics workshop, focusing on seismic processing, electromagnetics, and resistivity.
- Gained hands-on experience in geophysical surveying and data analysis, applying techniques to real-world scenarios.
- Collaborated with industry professionals and peers to solve geophysical challenges, strengthening teamwork and problem-solving skills.

Industry collaboration with UNSW and Newcrest

Sept 2022 – Dec 2022

UNSW

- Collaborated with peers on designing and formulating blueprint prototypes required by Newcrest, using AutoCAD to produce
 3D models.
- Demonstrated strong time management by writing weekly reports and adapting feedback from the Newcrest Coordinator.
- Presented ideas and the final prototype to Newcrest, receiving positive feedback and acknowledgement of selected components for further consideration by the Newcrest professional team.

Structural Geology - Field-Based Coursework

Earth Structures

Feb 2022 - Apr 2022

• Developed field mapping techniques, measured and recorded structural features (e.g. folds, faults, bedding), and constructed geological maps and cross-sections.

Field Methods and Mapping

Sept 2021 – Dec 2021

Applied structural geology principles to interpret deformation histories, analysed stereonets, and conducted field mapping
along the coastline of Bermagui, and produced a detailed geological map of the area.

EXTRACURRICULAR EXPERIENCE

Secretary

Mar 2023 - Oct 2023

Geosoc UNSW (Geological Society)

• Coordinated with fellow club leaders to secure funds and plan an engaging industry night for students to interact and connect with professionals in the Earth Science field.

Mentee

May 2022 – July 2022

Career Discovery Mentorship Program, UNSW

• Engaged in Career Development Learning, by connecting with a mentor from the Environmental Consulting Industry to strategise career development and awareness.

SKILLS & LICENSES

• Driver's Licence

DUG Insight

loGas

ArcGIS

RStudio

HighScore

WORK EXPERIENCE

Visitor Host Experience

Nov 2023 - May 2024

Australia Museum

• Provided high-quality customer service as the first point of contact, utilising strong problem-solving skills to address inquiries and deliver accurate, up-to-date information about essential information Australia Museum programs and updates.

Research Assistant Aug 2022 – Nov 2022

WB Clarke Geoscience Centre-Londonderry Core Library

• Conducted drill core handling using light spectroscopy equipment and performed quality control to prevent cross-contamination, ensuring accurate data acquisition.

References

References are available upon request.